

## Teaching Notes for Physicians:

### Giving Feedback that Enhances Learning

#### Background

By definition, feedback is information that is provided on aspects of performance or understanding(1). Feedback is a gift offered with the intent to provide information that the receiver may then choose to accept, modify, or ignore(2); it is also one of the most powerful influences on learning and is highly valued by learners, reported to reinforce a positive view of medicine as a career and to build confidence in self-as-physician(3). And yet medical students and residents report getting less feedback than they feel they need(1;3;4), perhaps because giving feedback can seem daunting, and poorly-managed feedback can be perceived by recipients as teaching by humiliation(5). Offering effective feedback is a skill that can be learned, however. These guidelines will help you to become comfortable and proficient at using feedback as an effective teaching strategy.

#### The benefits of feedback

Learners use feedback to:

- Identify knowledge-gaps
- Identify, correct misunderstandings
- Enhance reasoning skills
- Identify, correct faulty procedural skills
- Improve self-regulation<sup>i</sup>
- Build confidence

#### Four levels for focussing feedback

Hattie and Timperley(1) describe four levels at which feedback can be given:

<sup>i</sup> Self-regulation consists of self-generated thoughts, feelings and actions that are planned and cyclically adapted to the attainment of personal goals.(1)

1. Personal qualities
2. Knowledge (tasks)
3. Process (reasoning, procedural skill)
4. Self-regulation

1. Commenting upon personal qualities, unless remediable and specifically task-related, is unprofessional.(6) Pure praise or negative comment without any task-related information added has no educational value.

2. Feedback to adult learners on knowledge-gaps is problematic as it is often redundant or perceived as threatening, and when given in a group setting, is easily discounted or diluted.

3. By contrast, learners welcome feedback on their understanding, clinical reasoning, or skills. It can be used to enhance knowledge-building and self-detection of errors, cue them to more effective reasoning strategies, and build self-efficacy.

4. Feedback on the ability to self-appraise, adjust learning behaviour, and judge when to seek outside input helps guide learners toward internal monitoring, self-regulation and independent learning. This is the ultimate goal when educating professionals who will be solely responsible for directing their own continued education throughout their careers.

#### Principles of giving effective feedback

Three questions describe the learning journey;

Where are you going? How are you going?  
Where to, next? (1)

### *Where are you going?*

If feedback is intended to help learners to achieve their educational goals, those goals must be specific, perceived as attainable, shared by the teacher and the learner, and made explicit. Feedback then becomes the mechanism you use to help answer “How are you going?” and to offer guidance on “Where to, next?”

### *How are you going?*

Answering this question provides a pure evaluation of learners’ performance. Evaluation without instruction won’t help your learner to progress; good feedback must therefore contain an advisory or constructive element that enhances learners’ ability to internally monitor their own performance, and will encourage increased effort or guide the adoption of new strategies to achieve learning success.

### *Where to, next?*

Task failure should be turned into new challenges; recognition that learning goals have been achieved should be followed by encouragement to refine or seek new and more challenging goals.

## **Eight elements of effective feedback**

1. Agreed goals
2. Expected
3. Specific
4. Timely
5. Owned
6. Balanced
7. Rationed
8. Nonjudgemental

### 1. Agreed goals

It is impossible to give precise feedback on fuzzy goals: agree clear and specific goals with learners at the start, negotiating these if appropriate (to master the complete cardiac examination, for example). Specific goals enable well-directed effort, more accurate self-appraisal, and information-rich feedback that enables further goals to be set.

### 2. Expected

Establish the expectation of ongoing feedback by formally scheduling time for it, in addition to giving feedback informally when working in close contact with learners (on the wards, for example). Feedback should be perceived as an essential teaching element, not an ad-hoc response to problem behaviour.(2) Invite feedback on your teaching and encourage the whole team to practise giving and receiving feedback.

### 3. Specific

Precise and detailed feedback has more learning value than impressions; giving positive feedback on the individual components of a good performance will enable other learners to emulate it, while identification of a precise area for improvement allows learners to remedy in future, and also enhances self-appraisal skills.(7)

#### Compare:

- You took a decent history
- Your social history of the pancreatitis showed you understood the pathophysiology and allowed us to focus more on biliary tract disease and less on alcoholism

### 4. Timely

Research indicates that feedback on less complex tasks, such as inserting a catheter, should be given close to the event – the end of a rotation is a poor choice as you both may have forgotten the details. Avoid times when you or the learner are tired or emotionally-charged.(3) Learners appreciate thinking time before feedback on more complex or broader-range tasks, such as intellectual performance in an examination; this allows them to reflect and identify their own areas of concern.(1;8)

### 5. Owned

Base your feedback on your own observations; anyone else’s opinion is hearsay. Stick to observed decisions and actions, don’t infer intent.(9)

#### 6. Balanced

Include both positive feedback on excellent performance, and constructive feedback on what could be done better. Give the positive feedback first. Make a mutually-agreed plan for how the learner can improve; try saying, "If you were to do it again, what would you do differently? how?"

#### 7. Rationed

This is not an opportunity to vent or demonstrate superiority; learners are easily overwhelmed by a torrent of feedback. Limit the discussion to only two or three of the most important areas for improvement; they'll be remembered and are more likely to trigger action.

#### 8. Nonjudgemental

Describe remediable behaviours not personal attributes; avoid evaluative phrases.

#### Compare:

- I think your case presentation would be improved if you spoke more slowly and repeated key features
- Your accent is hard to understand

#### **Anatomy of a feedback session**

Find an appropriate setting, free from interruption and on neutral territory if possible. Once feedback becomes an accepted part of the teaching routine, you can take advantage of informal opportunities too. Feedback on areas for improvement is best given in private to prevent learners from feeling humiliated. There is evidence that adults interpret publicly-given positive feedback to be an indication that the teacher judges them to be of low ability.(1) Talk openly with your learners to get their input on this; try saying, "How do you prefer to hear feedback on your performance?"

Pendleton's rules are commonly used for delivering a mix of both positive and constructive feedback. Listen attentively and check understanding throughout. First review the learning goals. Invite the learner

to comment on what went well and add your feedback. Now ask the learner what didn't go so well, and for ideas on what to do differently next time. Offer your feedback on areas for improvement; help to turn weaknesses into constructive challenges by using questions that stimulate individuals to conceptualize their own solutions.(2) Negotiate a mutually-agreed plan for improvement, getting a commitment on this; you then become allies working towards a common goal. This positive critique approach helps learners to refine their ability to reflect, making self-appraisal more accurate. Invite learner feedback at the end of the session. Don't forget to follow up on the new learning plan in future sessions.

#### **Inviting and receiving feedback**

Confident learners will actively seek your feedback, positive or otherwise, to help them improve performance. Low self-efficacy learners prefer no feedback; to avoid demotivating them, be sure to stress that you attribute poor performance to inadequate effort, not low ability.(1) Don't shoulder sole responsibility for feedback; it is also the learner's job to decide learning goals, self-monitor, and refine the plan.

Everyone has a choice about how they will use feedback. If you are confronted with poorly-managed negative feedback, listen to it and thank the giver for it, but do not feel you must respond immediately. Make sure you understand what is being said, asking for clarification if necessary, and avoid being defensive. Reflect before you decide how much of this feedback you will accept and whether you will act upon it. Remember that feedback is the gift of another's perceptions.

#### **Enjoy your teaching!**

For further information or confidential no-charge teaching consultations, contact us:

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### Reference List

- (1) Hattie J, Timperley H. The power of feedback. *Review of Educational Research* 2007;77(1):81-112.
- (2) Renner P. Processing feedback. The art of teaching adults. 10th ed. Vancouver: PFR Training Associates Ltd; 2005.
- (3) Vickery AW, Lake FR. Teaching on the run tips 10: giving feedback. *Medical Journal of Australia* 2005;183(5):267-8.
- (4) Reynolds E, Ende J. Feedback for medical education. In: Distelhorst LH, Dunnington GL, Folse JR, editors. Teaching and learning in medical and surgical education: lessons learned for the twenty-first century. Mahwah, NJ: Lawrence Erlbaum Associates Inc; 2000. p. 109.
- (5) Mohanna K, Wall D, Chambers R. Teaching made easy: a manual for health professionals. 2nd ed. Abingdon: Radcliffe Medical Press Ltd; 2004.
- (6) Weinholtz D, Edwards J. Teaching during rounds: a handbook for attending physicians and residents. Baltimore: Johns Hopkins University Press; 1992.
- (7) Elwyn G, Greenhalgh T, Macfarlane F. Groups: a guide to small group work in health care, education and research. Abingdon: Radcliffe Medical Press Ltd; 2004.
- (8) Hays R. Teaching and learning in clinical settings. Oxford: Radcliffe Publishing; 2006.
- (9) Dent JA, Harden RM. A practical guide for medical teachers. Philadelphia: Elsevier Churchill Livingstone; 2005.